

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A cone crusher (20) which comprises:
 - a bowl (4) having a concave liner (3);
 - a head (2) having a mantle (1) and which is capable of carrying out gyratory movement within the bowl (4) so that the concave liner (3) and the mantle (1) define a generally annular crushing space and cooperate to exert a crushing action on crushable material in such space; and
 - a drive train coupled with the head (2) and operative to apply gyratory movement thereto;
 - in which the drive train comprises:
 - an upright drive shaft (15);
 - an eccentric (9) mounted on, and arranged to be driven by the drive shaft (15), said head (2) being mounted on the eccentric (9) in such a way that the head is driven to carry out gyratory movement within the bowl (4); and
 - a drive motor (14) coupled with a lower end of the drive shaft (15), said motor having a small lateral extent, measured radially outwardly of the axis of the drive shaft (15), so as to present minimum obstacle to direct downward gravity discharge of crushed material from the crushing space defined between the concave liner (3) and the mantle (1);
 - characterized in that the upright drive shaft is mounted for rotation internally of a main shaft securely located in the frame of the crusher and on which the rotating head assembly is centred.

3. (cancelled)
4. (currently amended) A cone crusher according to Claim 1 or 2, in which the motor (14) has a lateral extent which is less than the radial extent of the head (2).
5. (currently amended) A cone crusher according to any one of Claims 1 to 4 Claim 1, in which the motor (14) is a hydraulic motor or an electric motor.
6. (currently amended) A cone crusher according to any one of the preceding claims Claim 1, in which the eccentric (9) is rotatable about the axis of the main shaft (15), supported by thrust bearing (10) and radial bearing (11), and the head (2) is capable of revolving about a second offset axis, by being carried on the outer bearing faces of the eccentric (9) and supported by a thrust bearing (12) and radial bearing (13).
7. (currently amended) A cone crusher according to any one of the preceding claims Claim 1, in which the crushing gap between the concave liner (3) and the mantle (1) is adjustable, by upward/downward adjustment of the bowl (4) relative to the frame (6).
8. (currently amended) A cone crusher according to Claim 7, in which the bowl (4) is externally threaded, and is mounted on the frame (6) via an internally threaded adjustment ring (5), whereby relative rotation therebetween provides height adjustment of the bowl (4).
9. (currently amended) A cone crusher according to any one of the preceding claims Claim 1, in which the drive motor (14) is coupled directly with the lower end of the drive shaft (15).
10. (currently amended) A cone crusher according to any one of the preceding claims Claim 1, and forming part of a mobile crusher plant.